

## ABSTRACT

Live attenuated vaccines against brucellosis and infection by other diseases are described. It has been discovered that trans complementation of the *Brucella whoA* gene can be used to maintain an expression vector in an attenuated *Brucella* host cell in a vaccinee. Further, heterologous antigens can be expressed using this *Brucella* platform, thus effecting a multivalent vaccine against *Brucella* and the disease corresponding to the heterologous antigen.